

Energy consumption on school uniform ironing: a case study in Malaysia

Abstract:

Almost all children in Malaysia wear ironed uniform when they go to school, following the standard dress code that is issued by Malaysian Education Ministry. Indirectly, this school uniform ironing contributes to the energy consumption in residential sector in Malaysia. This paper attempts to investigate the status of energy used due to this activity, and to predict the amount of energy savings in the residential sector in Malaysia through the use of the un-iron uniform material. The energy measurements are based on the data reading on the smart meter during the ironing. For the energy saving prediction, the calculations are based on the population growth data in Malaysia. By retaining the school uniform ironing, about 3819 GWh can be saved from year 2010 to 2030. Therefore, this effort could assist in delaying the process of energy sources depletion and could extend the energy security in Malaysia for a longer time.